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April 16, 2001

Ms. Magalie Roman Salas
The Secretary
Office of the Managing Director
Federal Communications Commission
445-12th Street, S.W. - TW-A325
Washington, D.C. 20554

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Dear Ms. Salas:

Siemens Corporation is pleased to submit comments in response to the FCC report released on March 30, 2001, which addresses the potential for sharing or segmenting the 2500-2690 MHz band for possible "3G" systems.

We recognize and fully appreciate the challenges, outlined in the FCC and NTIA reports, to allocate the spectrum for advanced wireless services. In the comments that follow, Siemens offers several suggestions to address these challenges. We are hopeful that the U.S. government and industry will fashion a solution quickly to prevent the U.S. from falling further behind in bringing exciting new wireless services to the marketplace.

Thank you for providing us with the opportunity to comment.

Sincerely,

Greggoward Vice President

Government Affairs

**Siemens Corporation** 

701 Pennsylvania Avenue, N.W. Suite 720 Washington, DC 20004 Tel: (202) 434-4800 Fax: (202) 347-4015

In the Matter of

Wireless Systems

#### **Information and Communication Mobile**

## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

Notice of Proposed Rule Making to Allocate Spectrum Below the 3 GHz for Mobile and Advanced Wireless Services including Third Generation

Docket No. 00-258

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PERSONAL GOMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

# COMMENTS OF THE SIEMENS CORPORATION TO THE FINAL REPORTS OF FCC AND DOC/NTIA

Mark Esherick
Director, IT and Telecommunications

Siemens Corporation 701 Pennsylvania Avenue, NW Suite 720 Washington, DC 20004 Christoph Legutko
Director, Frequency Management

Siemens AG, ICM N BO Hofmannstr.51 D-81359 Munich Germany

#### Information and Communication Mobile

#### INTRODUCTION

Siemens Corporation is pleased to submit comments responding to the FCC March 30, 2001 Spectrum Study of the 2500-2690 MHz Band Final Report and the Department of Commerce March 2001 Final Report on the Potential for Accommodating Third Generation Mobile Systems in the 1710-1850 MHz Band.

According to the FCC's report, introduction of 3G systems in the 2.5GHz band presents a number of complex issues that need resolution. Heavy usage of the band by ITFS, MDS and MMDS systems requires a solution that allows relocation with minimum technical and financial obstacles. A similar conclusion can be drawn from the Department of Commerce's report. Occupation by defense and satellite systems, usage rights of nearly all federal government departments, high relocation costs and lengthy relocation time frames are among the issues that must be addressed before 3G systems in the discussed bands can be deployed in a timely and efficient manner.

The FCC and the Department of Commerce seek comment on how to implement 3G systems in the United States given these challenges. Siemens Corporation is pleased to present ideas that address these questions.

#### DISCUSSION

#### 1710-1850 MHz

The 1710-1850 MHz band proposal is the most attractive of all of the proposals, for it has the potential for worldwide acceptance as an alternative harmonized coreband. The relocation costs involved in this proposal are in the mid-range. Thus, this proposal should be further studied to determine how quickly this spectrum could be allocated for 3G services. As a part of this study, Siemens recommends that a phased-in implementation schedule is analyzed, whereby a determination is made as to the effects of partial allocation, regional allocation and national allocation.

#### 2.5-2.69 GHz

For the 2.5-2.69 GHz band, there may be a way to replace the existing analog and digital ITFS, MDS and MMDS systems on a regional, phased-in basis with 3G systems. Such a solution would be beneficial for all parties.

- Standardized transmission technology would allow incumbent users providing educational, medicinal or theological services to make their programs available to a much wider audience.
- A new market for hardware, software, networks and new services would open for the IP and telecommunications industries. Additionally, a phased-in approach would counter balance any potential market disruptions that could occur if all systems were replaced at once on a nationwide basis.
- The general public would benefit from the wide range of content services enabled by new technologies.

There is still the remaining stand-alone band at 2110-2150 MHz, with 2160-2165 MHz available for usage. Since the TDD was developed for use having asymmetrical spectrum available, operating the TDD in the 2110-2150 MHz band would allow asymmetrical services to operate in the 2160-2165 MHz band. The draughty migration inside the symmetrical PCS bands from 2G systems to the FDD mode would cover the wide areas with unified 3G systems.

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#### CONCLUSION

The conclusions of the FCC and the Department of Commerce demonstrate that in order to offer 3G systems in the United States in a timely and cost-effective manner, new approaches must be taken to resolve the complex issues presented in the reports.

Siemens recommends the following:

- Determine how to make portions of the 1710-1850 MHz band available for 3G systems.
- Migration towards 3G inside the PCS bands using FDD technology.
- Implementation of TDD in 2110-2150, 2160-2165 MHz bands.
- Unification of transmission technologies with FDD/TDD in the 2.5-2.69 GHz band instead of the existing analog and digital systems.

While these recommendations are an initial blueprint that require further study, Siemens believes that they present a possible scenario under which 3G systems could be quickly introduced in the United States.

Respectfully submitted,

SIEMENS CORPORATION

Gregg Ward Vice President Government Affairs